

Appendix J

PLACER LEGACY QUANTITATIVE IMPLEMENTATION SCENARIOS

The following tables present the assumptions and the methodology used by the Planning Department staff and planning consultant, Thomas Reid Associates (TRA) to derive the inputs for the economic analysis conducted by Hausrath Economics Group in May of 2000. The narrative explains the purpose of the analysis, the methodology, and the sources.

Purpose

Three scenarios are developed: Low Involvement, Moderate Involvement, and High Involvement. These quantitative scenarios are based on the objectives set by the Citizens Advisory Committee and the Board of Supervisors, interpreted by staff to reflect a general priority of effort from low to high. The scenarios reflect staff estimates of the land area and management intensity needed to meet objectives at the various levels. The estimates take into account the extent of the resources and the geographic opportunities. They reflect the quantitative geographic inventory of Placer County, but they are **not** derived from a map of specific conservation areas or candidate management land parcels.

The quantitative scenarios, the discussion of implementation opportunities above, and the specific areas described in Chapter IV focus on the specific role of Placer Legacy in implementing Placer County General Plan policies. The scenarios do not include existing public land nor do they include the results of the regional wetland or endangered species permitting process described in the following Section. That permitting process leading to a Habitat Conservation Plan (HCP) and a Natural Communities Conservation Plan (NCCP) would provide additional preservation of biological resources to mitigate the effects of covered activities.

The acreage figures are intended to show a wide range of possible scenarios for Placer Legacy implementation to serve as a basis for the economic analysis. The reader is cautioned to bear in mind the purpose of these scenarios: to allow the County to consider the full range of possible costs associated with obtaining the public interest and managing the land. These are estimates. The actual areas, and of course the actual location of the land involved, would be based on a process of priority setting, establishment of objectives, and voluntary negotiations with land owners which would stretch over many years.

Methodology

In order to provide a complete basis for the economic analysis, the quantitative scenarios establish a series of area estimates by element and by study area for the low, moderate, and high levels of effort. The biology element is derived from estimates of possible conservation for riparian and creeks, foothill woodland, vernal pools and grassland, and Sierran habitats.

Four Table groups are presented here:

- | | |
|------------|----------------------|
| Group I. | Low Involvement |
| Group II. | Moderate Involvement |
| Group III. | High Involvement. |
| Group IV. | Summary |

The first three Table groups follow the same organization and present the same information about each of the three scenarios. Within each group, Set A shows all of the Placer Legacy Elements and Set B shows the detail used to develop the Biological Resources totals which appear in Set A. The list of Tables below gives the Table number and title for Group I, Low Involvement. The list would be the same for Groups II and III for the Moderate and High Involvement scenarios, respectively. All of assumptions and all of the tables used as input to the economic analysis are presented here; several “helper” tables used for intermediate steps in calculations are not included to avoid confusion.

I.A. Low Effort Scenario: Placer Legacy Draft Conservation Targets

This set of tables establishes the conservation targets, estimates overlap, and calculates initial and ongoing costs using assumed cost factors.

Data are presented for each study area (refer to Placer Legacy Atlas of Maps, Map 4, Placer Legacy Study Areas):

1. Agricultural Valley
2. South Placer Urban
3. Loomis Basin
4. Sheridan / Garden Bar
5. Auburn / Bowman
6. American River Canyon
7. Lower Sierra
8. Foresthill
9. West Slope Sierra
10. East Slope Sierra

And for each Placer Legacy element:

- A. Agriculture
- B. Biological Resources
- C. Outdoor Recreation
- D. Cultural Resources
- E. Scenic/ Urban Separators
- F. Public Safety

I.A.1. Summary of Conservation Targets for All Elements (area in acres)

Lists area in acres that represent the conservation target for this scenario. The study areas are listed along with the total acreage of the study area. The targets for the elements come from staff estimates, for biology, the acreage comes from Table I.B.1, discussed below. The column totals for each element are rounded to give the values in Chapter III, Implementation Scenarios: Range of Overall Land Management Effort. The final columns sum the rows, and shows the sum as a % of the study area acreage. Note that the sum does not take into account overlap and does not represent the total acreage believed to be needed.

I.A.2. Element Overlap – Percent of Target that can be fulfilled by Biological Resources

Presents estimated overlap factors to help calculate total area needed for a multi-objective program. For each element except biology, the factor represents how much of the element's objectives are likely to be met by lands selected for or providing biological resources value. In the Low Involvement scenario, overlap is zero or low. For other scenarios, it is assumed to be high. For example, in the Moderate Involvement scenario, staff estimates that 80% of outdoor recreation needs in the Loomis Basin will be met on land also providing for biological resources there. Biology is listed as "n.a." not applicable, because it is the base against which overlap is estimated.

I.A.3. Element Overlap – Residual Area Needed In Addition to Biological Resources (area in acres)

The purpose of this table is to compile the total land area needed, taking into account the overlap between multiple objectives. The thinking behind the table is: if the biology element target is met, how much land will the other elements need, considering that some proportion of that need is met by the biology lands, according to the previous table? Thus, the Biology column is the same as in Table I.A.1 because it is the starting point, each other cell is equal to the maximum value of a) the element target times one minus the overlap factor, b) the element target minus the area sum without overlap times the element overlap factor, or for the High scenario c) the full element target if that target is the greatest area need for that study area. The logic allows an estimate of overlap, compensating for the size disparity between targets.

The values in each cell do not necessarily represent the effort that would need to be made to meet objectives for that element. A later table apportions cost on a pro-rata basis. The purpose is to avoid double counting the cost of obtaining the public interest, where the same acre will be meeting more than one objective. The final columns show the total acreage with overlap and that acreage as a percent of the total acreage in each study area.

I.A.4 Planning and Start-up Factors (\$/acre)

Lists staff estimates of the initial costs in \$ per acre to plan for and complete one-time improvements on the land base. Actual expenditures would probably be made over a period of a few years, but are distinct from annual operating costs estimated separately. Values are low for agriculture reflecting incidental costs such as fencing and minor water supply changes. Values for biology come from Table I.B.3, Planning and Start-up Costs – Biology, which takes into account the vastly different costs for different habitats such as riparian restoration v. foothill woodland. Values for recreation and cultural resource preservation are staff estimates based on data from existing County parks and historical sites, data from regional park and open space districts elsewhere, and data on facilities development costs. Scenic and public safety costs are low and reflect mostly planning for monitoring. The scale factor for the Low Involvement scenario is 1.60 compared with the Moderate scenario as the base case used in estimating costs. That means that when these per-acre costs are applied to the acreage for management, there is a 60% surcharge to reflect the reduced economies to scale for the Low Involvement scenario.

I.A.5. Planning and Start-up Costs (\$1000)

The factors in the previous table, I.A.4., are multiplied times the area target values in Table I.A.1. to get a total initial cost. The full target acreage is used here rather than the residual area in Table I.A.3. because the element objectives will have particular planning and start-up costs. For example, a park site may need a parking area for recreation and star thistle control for biology.

I.A.6. Operating and Monitoring Factors (\$/acre/year)

Lists staff estimates the annual operating costs in \$ per acre per year to carry out management and monitoring (for biology). Values are very low for agriculture reflecting minor monitoring for easements. Values for biology come from Table I.B.4, Operating and Monitoring Costs – Biology, which takes into account the different costs for different habitats. Values for recreation and cultural resource preservation are staff estimates based on data from existing County parks and historical sites, data from regional park and open space districts elsewhere. Scenic and public safety costs reflect minor monitoring for easements. The scale factor for the Low Involvement scenario is 1.60 compared with the Moderate scenario as the base case used in estimating costs. That means that when these per-acre costs are applied to the acreage for management, there is a 60% surcharge to reflect the reduced economies to scale for the Low Involvement scenario.

I.A.7. Operating and Monitoring Costs (\$1000)

The factors in the previous table, I.A.6., are multiplied times the area target values in Table I.A.1. to get a total initial cost. The full target acreage is used here rather than the residual area in Table I.A.3. because the element objectives will have particular operating costs. For example, a park site may need a ranger for public safety and also a wildlife biologist for monitoring.

I.A.8. Acquiring the Public Interest – Cost (\$1000)

The first two data rows list assumptions on easements. Each element has an assumed proportion of the public interest that could be met by an easement, the balance is assumed to be fee title acquisition. Where an easement is used, the elements differ in the cost of an easement as a percentage of the full fee title acquisition cost. The first data column lists the present day land value for each study area. The transaction cost is a multiplier that adds 5% to the land cost for realty, title, etc.

The residual area values in Table I.A.3 are applied against a formula using the assumptions about easement proportion and cost to give the residual dollar value for the element's contribution to the overall public land management interest. These values are not individually meaningful, but do sum to give a grand total. The final columns give the area total and the percent of all expenditures that each study area represents.

I.A.9. Prorated Share of Acquiring the Public Interest – Cost

In order to estimate the proportional share of cost for the various Placer Legacy elements, a pro-

rata share is calculated. This is needed because the methodology used to calculate land area uses biology as a basis and the previous table, I.A.9. suggests a disproportionate cost for biology. For example, under the Moderate Involvement scenario, Table I.A.9. suggests that the 23,121 acres of biology costs \$60,694,000 (\$2625 per acre average), but that some 15,840 acres of outdoor recreation could be acquired for only \$2,812,000 (\$177 per acre average), which is unrealistic. This discrepancy is an artifact of the methodology which has the biology needs calculated first and recreation needs only make up the small balance of cost.

The “fair share” calculation takes each element target area as a percent of the sum of element targets from Table I.A.1. And multiplies this area proration times the total cost of obtaining the public interest. This has the effect of spreading total cost evenly across the land area.

It is assumed that the different elements have the same base land cost in the each study area, but they will differ in the cost and applicability of easements. Thus, farmland conservation can be accomplished with essentially 100% easement and at an easement cost of 50% of fee title and this makes an acre of agricultural conservation cheaper than an acre of biological conservation (50% easement and 75% of full price), even when the base land price is the same. The row “easement factor” shows the effective percent of full cost for each element due to the easement assumptions. This factor is applied to the flat prorated cost distribution to give the “leveraged cost”. Leveraged cost is proportional to actual cost, but sums to less than the actual cost. The “easement scale factor” is the amount that must be multiplied times the leveraged cost sum to bring it back to the actual estimated cost for the scenario.

The value for “factored share” shows that calculation and is a fair guide to the distribution of total cost spread across the elements, taking into account the magnitude of the area targets and the different cost of easements.

I.B. Low Effort Scenario: Biological Resources Detail

The tables in this set provide habitat-specific results for the different study areas. Individual area estimates are made for each study area for the four overall habitat types:

Vernal Pool/ Grassland. Area reflects an emphasis on large vernal pool complexes, not the wetland area of the vernal pools themselves (refer to methodology of J. Glazner, vernal pool assessment).

Creeks/ Riparian. The channel, surrounding natural flood plain and in steeper lands, some adjacent upland.

Foothill Woodland. Includes all foothill habitats:, grassland, savanna, chaparral, blue oak, and lower mixed conifer woodland. Many smaller riparian areas are included in this type as part of the overall mosaic.

Sierra Nevada. The vast complex of Sierran habitats.

I.B.1. Conservation Targets by Habitat Group – Area (acres)

The values are staff conservation target estimates for each study area. The acreage value for riparian comes from the next table I.B.2. The values were selected to reflect differing levels of conservation, emphasizing the higher value and more imperiled resources first.

I.B.2. Conservation Targets For Riparian and Creek – Length and Area (acres)

Riparian acreage estimates are compiled by estimating the length of riparian corridor and its average width for each study area and for two levels of treatment: enhancement and protection. Enhancement would entail some channel restoration and revegetation. Protection is largely fencing, access control, and removal of minor in-stream barriers.

I.B.3. Planning and Start-up Costs – Biology

The first data row lists cost estimates in \$ per acre for initial site preparation. Costs for biological protection are moderate; costs for restoration and enhancement are high. The emphasis of the Placer Legacy is on protection, not mitigation, and the overall approach is intended to reflect a philosophy of low intensity management. Cost data were derived from a variety of sources: TRA management projects, local biologists, and the cost model from the Center for Natural Lands Management. Without an actual tract of land to evaluate, cost estimation is speculative. In practice, actual costs of specific projects would be both far below and far above these average values.

I.B.4. Annual Operating Costs – Biology

The first data row lists cost estimates in \$ per acre for annual operating and monitoring. Annual costs reflect a low intensity management for most areas. As with planning and start-up, actual cost for operations will depend on the specific project and will range widely about these mean values. Data sources are as in Table I.B.3.

II.A and B. Present the same information for the Moderate Involvement scenario. The scale factor in Tables II.A.4. and II.A.6. is 1.00, meaning that the Moderate scenario is the base case used in estimating costs.

III.A and B. Present the same information for the High Involvement scenario. The scale factor in Tables III.A.4. and III.A.6. is 0.90, meaning that the High Involvement scenario cost factors are given a 10% reduction over the Moderate scenario factors to reflect improved economies to scale from the larger program.

IV.A. Summary of Conservation Scenarios by Study Area

Table Group IV summarizes the previous tables and presents the three scenarios side-by-side.

IV.A.1. Extent of Public Interest by Study Area

Lists the area of public interest taking into account overlap with multiple objectives and gives the conservation acreage as a percentage of the total acreage in the study area.

IV.A.2. Planning for Public Interest Objectives and Start-up Costs (one-time)

Lists the planning and start-up costs by study area and gives the cost as a percentage of the total

cost under the scenario.

IV.A.3. Operations and Monitoring (Annual)

Lists the annual costs by study area and gives the cost as a percentage of the total cost under the scenario.

IV.A.4. Cost of Public Interest by Study Area

Lists the cost of acquiring the public interest in each study area and gives the cost as a percentage of the total cost under the scenario.

IV.A.5. Prorated Share of Public Interest Cost by Element

Lists the prorated or “factored” cost of acquiring the public interest for each Legacy element and gives that cost as a percentage of the total cost under the scenario. This table shows the relative emphasis on the various elements for each scenario as a proportion of cost.

IV.A.6. Summary of Area Management Targets by Element

Lists the area management targets for each Legacy element and gives that area as a percentage of the total cost under the scenario. This table shows the relative emphasis on the various elements for each scenario as a proportion of land area. Note that the sum of columns does not take into account overlap and is used here to calculate area proportion as a measure of emphasis.

IV.A.7. Tabulation of Area Management Targets

The same data as in the previous table, reformatted to match the table in Chapter III and without rounding.

Placer Legacy Quantitative Implementation Scenarios

I.A. Low Effort Scenario: Placer Legacy Draft Conservation Targets									
I.A.1. Summary of Conservation Targets for All Elements (area in acres)									
		A.	B.	C.	D.	E.	F.		
Name	Study Area Total	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic/ Urban Separators	Public Safety	Sum Without Overlap	Sum as % of Area
1 Agricultural Valley	56,067	200	1,812	300	0	0	0	2,312	4.1%
2 South Placer Urban	67,730	0	212	200	0	0	0	412	0.6%
3 Loomis Basin	45,440	0	376	40	0	0	0	416	0.9%
4 Sheridan / Garden Bar	74,523	200	2,404	1,000	0	0	0	3,604	4.8%
5 Auburn / Bowman	27,991	100	308	700	0	0	0	1,108	4.0%
6 American River Canyon	26,753	0	0	0	0	0	0	0	0.0%
7 Lower Sierra	42,360	0	273	200	0	0	0	473	1.1%
8 Foresthill	31,018	0	303	50	0	0	0	353	1.1%
9 West Slope Sierra	428,688	0	48	50	0	0	0	98	0.0%
10 East Slope Sierra	159,115	0	48	50	0	0	0	98	0.1%
Total	959,684	500	5,784	2,590	0	0	0	8,874	0.9%
I.A.2. Element Overlap – Percent of Target that can be fulfilled by Biological Resources									
Name	Study Area Total	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic/ Urban Separators	Public Safety		
1 Agricultural Valley	56,067		1 n.a.	0	0	0	0		
2 South Placer Urban	67,730	0		0	0	0	0		
3 Loomis Basin	45,440	0		1	0	0	0		
4 Sheridan / Garden Bar	74,523	1		1	0	0	0		
5 Auburn / Bowman	27,991	0		1	0	0	0		
6 American River Canyon	26,753	0		1	0	0	0		
7 Lower Sierra	42,360	0		1	0	0	0		
8 Foresthill	31,018	0		1	0	0	0		
9 West Slope Sierra	428,688	0		1	0	0	0		
10 East Slope Sierra	159,115	0		1	0	0	0		
Total	959,684								
I.A.3. Element Overlap – Residual Area Needed In Addition to Biological Resources (area in acres)									
Name	Study Area Total	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic	Public Safety	Total	% of Area
1 Agricultural Valley	56,067	100	1,812	300	0	0	0	2,212	3.9%
2 South Placer Urban	67,730	0	212	200	0	0	0	412	0.6%
3 Loomis Basin	45,440	0	376	20	0	0	0	396	0.9%
4 Sheridan / Garden Bar	74,523	100	2,404	500	0	0	0	3,004	4.0%
5 Auburn / Bowman	27,991	100	308	350	0	0	0	758	2.7%
6 American River Canyon	26,753	0	0	0	0	0	0	0	0.0%
7 Lower Sierra	42,360	0	273	100	0	0	0	373	0.9%
8 Foresthill	31,018	0	303	25	0	0	0	328	1.1%
9 West Slope Sierra	428,688	0	48	25	0	0	0	73	0.0%
10 East Slope Sierra	159,115	0	48	25	0	0	0	73	0.0%
Total	959,684	300	5,784	1,545	0	0	0	7,629	0.8%

Note: The open space and farmland conservation targets demonstrate one approach to implementation of the recommendations. Allocation among elements and between Study Areas would vary in application.

I.A.4 Planning and Start-up Factors (\$/ac)

1.60 Economy of Scale Factor (except Recreation)

	Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety
1	Agricultural Valley	25	302	500	500	10	500
2	South Placer Urban	45	723	2,500	500	10	500
3	Loomis Basin	60	435	5,000	500	10	500
4	Sheridan / Garden Bar	35	223	400	500	10	500
5	Auburn / Bowman	60	282	321	500	10	500
6	American River Canyon	0	0		500	10	500
7	Lower Sierra	0	241	1,000	500	10	500
8	Foresthill	0	256	2,000	500	10	500
9	West Slope Sierra	0	825	1,000	500	10	500
10	East Slope Sierra	0	825	1,000	500	10	500

I.A.5. Planning and Start-up Costs (\$1000)

	Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety	Total	% of Total
1	Agricultural Valley	8	876	150	0	0	0	1,034	22.3%
2	South Placer Urban	0	245	500	0	0	0	745	16.1%
3	Loomis Basin	0	262	200	0	0	0	462	10.0%
4	Sheridan / Garden Bar	11	858	400	0	0	0	1,269	27.4%
5	Auburn / Bowman	10	139	225	0	0	0	374	8.1%
6	American River Canyon	0	0	0	0	0	0	0	0.0%
7	Lower Sierra	0	105	200	0	0	0	305	6.6%
8	Foresthill	0	124	100	0	0	0	224	4.8%
9	West Slope Sierra	0	63	50	0	0	0	113	2.4%
10	East Slope Sierra	0	63	50	0	0	0	113	2.4%
Total		29	2,735	1,875	0	0	0	4,639	100.0%

I.A.6. Operating and Monitoring Factors (\$/ac/year)

1.60 Scale Factor

	Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety
1	Agricultural Valley	3	51	89	1,000	1	5
2	South Placer Urban	5	58	385	1,000	1	5
3	Loomis Basin	6	50	385	1,000	1	5
4	Sheridan / Garden Bar	4	46	89	1,000	1	5
5	Auburn / Bowman	6	37	89	1,000	1	5
6	American River Canyon	0	0	385	1,000	1	5
7	Lower Sierra	0	34	133	1,000	1	5
8	Foresthill	0	36	385	1,000	1	5
9	West Slope Sierra	0	63	385	1,000	1	5
10	East Slope Sierra	0	63	385	1,000	1	5

I.A.7. Operating and Monitoring Costs (\$1000)

	Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety	Total	% of Total
1	Agricultural Valley	1	148	43	0	0	0	191	19.0%
2	South Placer Urban	0	20	123	0	0	0	143	14.2%
3	Loomis Basin	0	30	25	0	0	0	55	5.4%
4	Sheridan / Garden Bar	1	177	142	0	0	0	320	31.9%
5	Auburn / Bowman	1	18	100	0	0	0	119	11.8%
6	American River Canyon	0	0	0	0	0	0	0	0.0%
7	Lower Sierra	0	15	43	0	0	0	57	5.7%
8	Foresthill	0	17	31	0	0	0	48	4.8%
9	West Slope Sierra	0	5	31	0	0	0	36	3.5%
10	East Slope Sierra	0	5	31	0	0	0	36	3.5%
Total		3	435	567	0	0	0	1,005	100.0%

I.A.3. Acquiring the Public Interest – Cost (\$1000)									
105.0% Transaction Cost									
	A.	B.	C.	D.	E.	F.			
Land Cost \$/ac	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic/ Urban Separators	Public Safety	Area Total	Area as % of All	
Extent of Easement (% of area)	1	1	0	0	1	1			
Easement Cost (% of Fee)	1	1	1	1	1	1			
1 Agricultural Valley	1,800	95	2,997	524	0	0	3,616	18.3%	
2 South Placer Urban	6,000	0	1,169	1,166	0	0	2,334	11.8%	
3 Loomis Basin	4,500	0	1,555	87	0	0	1,642	8.3%	
4 Sheridan / Garden Bar	2,600	137	5,743	1,263	0	0	7,142	36.1%	
5 Auburn / Bowman	6,000	315	1,698	2,040	0	0	4,052	20.5%	
6 American River Canyon	2,400	0	0	0	0	0	0	0.0%	
7 Lower Sierra	1,250	0	314	121	0	0	435	2.2%	
8 Foresthill	1,250	0	348	30	0	0	378	1.9%	
9 West Slope Sierra	1,250	0	55	30	0	0	85	0.4%	
10 East Slope Sierra	1,250	0	55	30	0	0	85	0.4%	
Total	28,300	546	13,932	5,292	0	0	0	19,770	100.0%
I.A.9. Prorated Share of Acquiring the Public Interest – Cost									
	A.	B.	C.	D.	E.	F.			
	Agriculture	Biological	Recreation	Cultural	Scenic	Safety	Area Total	Area as % of All	
Area proration	0	1	0	0	0	0			
Prorated cost distribution	1,114	12,886	5,770	0	0	0			
Easement factor	1	1	1	1	1	1			
Leveraged cost*	557	11,275	5,337	0	0	0	17,170	115.1%	
Factored share (\$1000)	641	12,983	6,146	0	0	0	19,770		
Share as % of Total	0	1	0	0	0	0			
* Percentage shown is "easement scale"									

I.B. Low Effort Scenario: Biological Resources Detail**I.B.1. Conservation Targets by Habitat Group (area in acres)**

--- Habitat ---						
No.	Name		Vernal Pool/ Grass land	Creeks/ Riparian	Foothill Woodland	Sierra Nevada
1	Agricultural Valley	56,096	1,000	812		
2	South Placer Urban	67,748	100	112		
3	Loomis Basin	42,298		276	100	
4	Sheridan / Garden Bar	77,743	1,000	1,004	400	
5	Auburn / Bowman	27,986		108	200	
6	American River Canyon	26,753		0		
7	Lower Sierra	42,360		73	200	
8	Foresthill	31,018		103		200
9	West Slope Sierra	428,688		48		0
10	East Slope Sierra	159,115		48		0
	Total	959,805	2,100	2,584	900	200
						5,784

Note: The targets reflect a reasonable expectation for public funding and do NOT reflect the effect of a regional mitigation program.

I.B.2. Conservation Targets For Riparian and Creek – Length and Area (ac)

		Creeks/ Riparian			Enhancement			Protection			Total	
No.	Name	Miles	Avg Width (ft)	Acres	Miles	Avg Width (ft)	Acres	Miles	Avg Width (ft)	Acres	Miles	Acres
1	Agricultural Valley	5	140	85	20	300	727	25			25	812
2	South Placer Urban	3	140	51	5	100	61	8			8	112
3	Loomis Basin	2	140	34	10	200	242	12			12	276
4	Sheridan / Garden Bar	2	140	34	40	200	970	42			42	1,004
5	Auburn / Bowman	1	140	17	5	150	91	6			6	108
6	American River Canyon							0			0	0
7	Lower Sierra	1	100	12	5	100	61	6			6	73
8	Foresthill	1	100	12	5	150	91	6			6	103
9	West Slope Sierra	1	100	12	2	150	36	3			3	48
10	East Slope Sierra	1	100	12	2	150	36	3			3	48
	Total	17		269	94		2,315	111			111	2,584

I.B.3 Planning and Start-up Costs – Biology

		---- Habitat ----					Total	Avg per ac
		Vernal Pool/ Grassland	Riparian Enhancement	Riparian Protection	Foothill Woodland	Sierra Nevada		
	Factor (\$/ac)	125	2400	300	94	107		
1	Agricultural Valley	125,000	204,000	218,100	0	0	547,100	302
2	South Placer Urban	12,500	122,400	18,300	0	0	153,200	723
3	Loomis Basin	0	81,600	72,600	9,400	0	163,600	435
4	Sheridan / Garden Bar	125,000	81,600	291,000	37,600	0	535,200	223
5	Auburn / Bowman	0	40,800	27,300	18,800	0	86,900	282
6	American River Canyon	0	0	0	0	0	0	0
7	Lower Sierra	0	28,800	18,300	18,800	0	65,900	241
8	Foresthill	0	28,800	27,300	0	21,400	77,500	256
9	West Slope Sierra	0	28,800	10,800	0	0	39,600	825
10	East Slope Sierra	0	28,800	10,800	0	0	39,600	825
	Total	262,500	645,600	694,500	84,600	21,400	1,708,600	295

I.B.4 Annual Operating Costs – Biology

		---- Habitat ----					Total	Avg per ac
		Vernal Pool/ Grassland	Riparian Enhancement	Riparian Protection	Foothill Woodland	Sierra Nevada		
	Factor (\$/ac)	45	85	55	25	25		
1	Agricultural Valley	45,000	7,225	39,985	0	0	92,210	51
2	South Placer Urban	4,500	4,335	3,355	0	0	12,190	58
3	Loomis Basin	0	2,890	13,310	2,500	0	18,700	50
4	Sheridan / Garden Bar	45,000	2,890	53,350	10,000	0	111,240	46
5	Auburn / Bowman	0	1,445	5,005	5,000	0	11,450	37
6	American River Canyon	0	0	0	0	0	0	0
7	Lower Sierra	0	1,020	3,355	5,000	0	9,375	34
8	Foresthill	0	1,020	5,005	0	5,000	11,025	36
9	West Slope Sierra	0	1,020	1,980	0	0	3,000	63
10	East Slope Sierra	0	1,020	1,980	0	0	3,000	63
	Total	94,500	22,865	127,325	22,500	5,000	272,190	47

II.A. Medium Effort Scenario: Placer Legacy Draft Conservation Targets**II.A.1. Summary of Conservation Targets for All Elements (area in acres)**

	Name	Study Area Total	A. Agriculture	B. Biological Resources	C. Outdoor Recreation	D. Cultural Resources	E. Scenic/ Urban Separators	F. Public Safety	Sum Without Overlap	Sum as % of Area
1	Agricultural Valley	56,067	4,000	3,260	500	0	3,000	1,200	11,960	21.3%
2	South Placer Urban	67730	650	827	100	5	200	100	1,882	2.8%
3	Loomis Basin	45440	100	472	40	5	200	25	842	1.9%
4	Sheridan / Garden Bar	74523	8,000	11,206	12,000	5	2,000	250	33,461	44.9%
5	Auburn / Bowman	27991	200	3,108	2,000	10	1,500	25	6,843	24.4%
6	American River Canyon	26,753	0	12	50	0	0	0	62	0.2%
7	Lower Sierra	42,360	0	2,133	1,000	0	500	10	3,643	8.6%
8	Foresthill	31,018	0	303	50	0	200	25	578	1.9%
9	West Slope Sierra	428,688	0	869	50	0	0	50	969	0.2%
10	East Slope Sierra	159,115	0	931	50	0	0	50	1,031	0.6%
	Total	959,684	12,950	23,121	15,840	25	7,600	1,735	61,271	6.4%

II.A.2. Element Overlap – Percent of Target that can be fulfilled by Biological Resources

	Name	Study Area Total	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic/ Urban Separators	Public Safety
1	Agricultural Valley	56,067	50%	n.a.	80%	0%	80%	90%
2	South Placer Urban	67730	60%	n.a.	60%	0%	50%	70%
3	Loomis Basin	45440	60%	n.a.	80%	0%	60%	90%
4	Sheridan / Garden Bar	74523	80%	n.a.	95%	0%	90%	90%
5	Auburn / Bowman	27991	80%	n.a.	95%	0%	80%	90%
6	American River Canyon	26,753	0%	n.a.	50%	0%	0%	0%

7 Lower Sierra	42,360	0%	n.a.	90%	0%	80%	70%		
8 Foresthill	31,018	0%	n.a.	50%	0%	80%	70%		
9 West Slope Sierra	428,688	0%	n.a.	50%	0%	0%	70%		
10 East Slope Sierra	159,115	0%	n.a.	50%	0%	0%	70%		
Total	959,684								
II.A.3. Element Overlap – Residual Area Needed In Addition to Biological Resources (area in acres)									
Name	Study Area Total	Agriculture	Biological Resources	Outdoor Recreation	Cultural Resources	Scenic	Public Safety	Total	% of Area
1 Agricultural Valley	56,067	2,000	3,260	100	0	600	120	6,080	10.8%
2 South Placer Urban	67,730	260	827	40	5	100	30	1,262	1.9%
3 Loomis Basin	45,440	40	472	8	5	80	3	608	1.3%
4 Sheridan / Garden Bar	74,523	1,600	11,206	600	5	200	25	13,636	18.3%
5 Auburn / Bowman	27,991	40	3,108	100	10	300	3	3,561	12.7%
6 American River Canyon	26,753	0	12	25	0	0	0	37	0.1%
7 Lower Sierra	42,360	0	2,133	100	0	100	3	2,336	5.5%
8 Foresthill	31,018	0	303	25	0	40	8	376	1.2%
9 West Slope Sierra	428,688	0	869	25	0	0	15	909	0.2%
10 East Slope Sierra	159,115	0	931	25	0	0	15	971	0.6%
Total	959,684	3,940	23,121	1,048	25	1,420	221	29,775	3.1%
Note: The open space and farmland conservation targets demonstrate one approach to implementation of the recommendations.									
Allocation among elements and between Study Areas would vary in application.									
II.A.4 Planning and Start-up Factors (\$/ac)									
Name		Agriculture	Biological	Recreation	Cultural	Scenic	Safety		
1 Agricultural Valley		25	416	1,875	500	10	500		

2 South Placer Urban	45	410	31,250	500	10	500		
3 Loomis Basin	60	396	31,250	500	10	500		
4 Sheridan / Garden Bar	35	116	208	500	10	500		
5 Auburn / Bowman	60	113	625	500	10	500		
6 American River Canyon	0	23,492	6,250	500	10	500		
7 Lower Sierra	0	119	1,250	500	10	500		
8 Foresthill	0	256	12,500	500	10	500		
9 West Slope Sierra	0	291	6,250	500	10	500		
10 East Slope Sierra	0	309	6,250	500	10	500		
II.A.5. Planning and Start-up Costs (\$1000)								
Name	Agriculture	Biological	Recreational	Cultural	Scenic	Safety	Total	% of Total
1 Agricultural Valley	100	1,356	938	0	30	600	3,024	16.8%
2 South Placer Urban	29	339	3,125	3	2	50	3,548	19.8%
3 Loomis Basin	6	187	1,250	3	2	13	1,460	8.1%
4 Sheridan / Garden Bar	280	1,300	2,500	3	20	125	4,227	23.6%
5 Auburn / Bowman	12	351	1,250	5	15	13	1,646	9.2%
6 American River Canyon	0	282	313	0	0	0	594	3.3%
7 Lower Sierra	0	254	1,250	0	5	5	1,514	8.4%
8 Foresthill	0	78	625	0	2	13	717	4.0%
9 West Slope Sierra	0	253	313	0	0	25	590	3.3%
10 East Slope Sierra	0	288	313	0	0	25	625	3.5%
Total	427	4,687	11,875	13	76	868	17,945	100.0%
II.A.6. Operating and Monitoring Factors (\$/ac./year)								

Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety		
1 Agricultural Valley	3	53	89	1,000	1	5		
2 South Placer Urban	5	52	385	1,000	1	5		
3 Loomis Basin	6	39	385	1,000	1	5		
4 Sheridan / Garden Bar	4	28	89	1,000	1	5		
5 Auburn / Bowman	6	26	89	1,000	1	5		
6 American River Canyon	0	85	385	1,000	1	5		
7 Lower Sierra	0	27	133	1,000	1	5		
8 Foresthill	0	36	385	1,000	1	5		
9 West Slope Sierra	0	45	385	1,000	1	5		
10 East Slope :Sierra	0	45	385	1,000	1	5		
II.A.7. Operating and Monitoring Costs (\$1000)								
Name	Agriculture	Biological	Recreation	Cultural	Scenic	Safety	Total	% of Total
1 Agricultural Valley	12	173	44	0	3	6	238	9.8%
2 South Placer Urban	3	43	39	5	0	1	90	3.7%
3 Loomis Basin	1	18	15	5	0	0	40	1.6%
4 Sheridan / Garden Bar	32	314	1,067	5	2	1	1,421	58.6%
5 Auburn / Bowman	1	81	178	10	2	0	271	11.2%
6 American River Canyon	0	1	19	0	0	0	20	0.8%
7 Lower Sierra	0	58	133	0	1	0	191	7.9%
8 Foresthill	0	11	19	0	0	0	30	1.3%
9 West Slope Sierra	0	39	19	0	0	0	59	2.4%
10 East Slope :Sierra	0	42	19	0	0	0	61	2.5%
Total	49	779	1,553	25	8	9	2,423	100.0%

II.A.8. Acquiring the Public Interest – Cost (\$1000)**105.0% Transaction Cost**

	A. Land Cost \$/ac	B. Agriculture Resources	C. Biological Recreation	D. Outdoor Recreation	E. Cultural Resources	F. Scenic/ Urban Separators	Public Safety	Area Total	Area as % of All
Extent of Easement (% of area)	100.0%	50.0%	30.0%	0.0%	100.0%	100.0%			
Easement Cost (% of Fee)	50.0%	75.0%	75.0%	75.0%	75.0%	75.0%			
1 Agricultural Valley	1,800	1,890	5,391	175	0	851	170	8,477	11.7%
2 South Placer Urban	6000	819	4,559	233	32	473	142	6,257	8.6%
3 Loomis Basin	4500	95	1,951	35	24	284	9	2,397	3.3%
4 Sheridan / Garden Bar	2600	2,184	26,768	1,515	14	410	51	30,942	42.5%
5 Auburn / Bowman	6000	126	17,133	583	63	1,418	12	19,334	26.6%
6 American River Canyon	2,400	0	26	58	0	0	0	85	0.1%
7 Lower Sierra	1,250	0	2,450	121	0	98	3	2,672	3.7%
8 Foresthill	1,250	0	348	30	0	39	7	425	0.6%
9 West Slope Sierra	1,250	0	998	30	0	0	15	1,043	1.4%
10 East Slope Sierra	1,250	0	1,069	30	0	0	15	1,114	1.5%
Total		5,114	60,694	2,812	132	3,571	424	72,746	100.0%

II.A.9. Prorated Share of Acquiring the Public Interest – Cost

	A. Agriculture	B. Biological	C. Recreation	D. Cultural	E. Scenic	F. Safety	Area Total
Area proration	21.1%	37.7%	25.9%	0.0%	12.4%	2.8%	
Prorated cost distribution	15,375	27,451	18,806	30	9,023	2,060	

Easement factor	50.0%	87.5%	92.5%	100.0%	75.0%	75.0%		
Leveraged cost	7,688	24,020	17,396	30	6,767	1,545	57,445	126.6% easement scale factor
Factored share (\$1000)	9,735	30,417	22,029	38	8,570	1,956	72,746	
Share as % of Total	13.4%	41.8%	30.3%	0.1%	11.8%	2.7%		

II.B. Medium Effort Scenario: Biological Resources Detail

II.B.1. Conservation Targets by Habitat Group – Area (ac)

No.	Name		---- Habitat ----			Total	
			Vernal Pool/ Grassland	Creeks/ Riparian	Foothill Woodland		Sierra Nevada
1	Agricultural Valley	56,096	1,500	1,760		3,260	
2	South Placer Urban	67,748	500	327		827	
3	Loomis Basin	42,298		172	300	472	
4	Sheridan / Garden Bar	77,743	1,000	206	10,000	11,206	
5	Auburn / Bowman	27,986		108	3,000	3,108	
6	American River Canyon	26,753		12		12	
7	Lower Sierra	42,360		133	2,000	2,133	
8	Foresthill	31,018		103	200	303	
9	West Slope Sierra	428,688		569	300	869	
10	East Slope Sierra	159,115		581	350	931	
	Total	959,805	3,000	3,971	15,300	850	23,121

Note: The targets reflect a reasonable expectation for public funding and do NOT reflect the effect of a regional mitigation program.

II.B.2. Conservation Targets For Riparian and Creek -- Length and Area (ac)

Creeks/ Riparian	Enhancement	Protection	Total
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No.	Name	Miles	Avg Width (ft)	Acres	Miles	Avg Width (ft)	Acres	Miles	Acres
1	Agricultural Valley	18	140	305	40	300	1,455	58	1,760
2	South Placer Urban	5	140	85	10	200	242	15	327
3	Loomis Basin	3	140	51	5	200	121	8	172
4	Sheridan / Garden Bar	5	140	85	5	200	121	10	206
5	Auburn / Bowman	1	140	17	5	150	91	6	108
6	American River Canyon	1	100	12			0	1	12
7	Lower Sierra	1	100	12	10	100	121	11	133
8	Foresthill	1	100	12	5	150	91	6	103
9	West Slope Sierra	2	100	24	30	150	545	32	569
10	East Slope Sierra	3	100	36	30	150	545	33	581
	Total	40		639	140		3,332	180	3,971
*									
II.B.3 Planning and Start-up Costs – Biology									
		---- Habitat ----							
		Vernal Pool/ Grassland	Riparian Enhancem ent	Riparian Protection	Foothill Woodland	Sierra Nevada	Total	Avg per ac	
	Factor (\$/ac)	125	2400	300	94	107			
1	Agricultural Valley	187,500	732,000	436,500	0	0	1,356,000	416	
2	South Placer Urban	62,500	204,000	72,600	0	0	339,100	410	
3	Loomis Basin	0	122,400	36,300	28,200	0	186,900	396	
4	Sheridan / Garden Bar	125,000	204,000	36,300	940,000	0	1,305,300	116	
5	Auburn / Bowman	0	40,800	27,300	282,000	0	350,100	113	
6	American River Canyon	0	28,800	0	0	0	28,800	2400	
7	Lower Sierra	0	28,800	36,300	188,000	0	253,100	119	
8	Foresthill	0	28,800	27,300	0	21,400	77,500	256	

9 West Slope Sierra	0	57,600	163,500	0	32,100	253,200	291
10 East Slope Sierra	0	86,400	163,500	0	37,450	287,350	309
Total	375,000	1,533,600	999,600	1,438,200	90,950	4,437,350	192
II.B.4 Annual Operating Costs: – Biology							
	---- Habitat ----						
	Vernal Pool/ Grassland	Riparian Enhancem t	Riparian Protection	Foothill Woodland	Sierra Nevada	Total \$	Avg \$/ac
Factor (\$/ac)	45	85	55	25	25		
1 Agricultural Valley	67,500	25,925	80,025	0	0	173,450	53
2 South Placer Urban	22,500	7,225	13,310	0	0	43,035	52
3 Loomis Basin	0	4,335	6,655	7,500	0	18,490	39
4 Sheridan / Garden Bar	45,000	7,225	6,655	250,000	0	308,880	28
5 Auburn / Bowman	0	1,445	5,005	75,000	0	81,450	26
6 American River Canyon	0	1,020	0	0	0	1,020	85
7 Lower Sierra	0	1,020	6,655	50,000	0	57,675	27
8 Foresthill	0	1,020	5,005	0	5,000	11,025	36
9 West Slope Sierra	0	2,040	29,975	0	7,500	39,515	45
10 East Slope Sierra	0	3,060	29,975	0	8,750	41,785	45
Total	135,000	54,315	183,260	382,500	21,250	776,325	34

III.A.. High Effort Scenario: Placer Legacy Draft Conservation Targets**III.A.1. Summary of Conservation Targets for All Elements (area in acres)**

Name	A. Study Area Total	B. Agricultural Resources	C. Biological Recreation	D. Outdoor Resources	E. Cultural Resources	F. Scenic/ Urban Separators	Public Safety	Sum Without Overlap	Sum as % of Area	Largest Element
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1 Agricultural Valley	56,067	25,000	4,497	1,800	5	4000	1,200	36,502	65.1%	25000
2 South Placer Urban	67,730	650	863	400	5	7200	100	9,218	13.6%	7200
3 Loomis Basin	45,440	400	955	400	5	3000	25	4,785	10.5%	3000
4 Sheridan / Garden Bar	74,523	12,000	12,982	12,000	10	3000	250	40,242	54.0%	12982
5 Auburn / Bowman	27,991	2,000	3,267	2,500	10	3600	25	11,402	40.7%	3600
6 American River Canyon	26,753	0	17	400	0	2500	0	2,917	10.9%	2500
7 Lower Sierra	42,360	0	3,413	1,000	10	1200	10	5,633	13.3%	3413
8 Foresthill	31,018	0	1,383	400	10	2200	25	4,018	13.0%	2200
9 West Slope Sierra	428,688	0	5,049	400	0	1500	50	6,999	1.6%	5049
10 East Slope Sierra	159,115	0	1,861	400	0	1000	50	3,311	2.1%	1861
Total	959,684	40,050	34,287	19,700	55	29,200	1,735	125,027	13.0%	66,805

III.A.2. Element Overlap – Percent of Target that can be fulfilled by Biological Resources

Name	Agriculture	Biological Resources	Recreation	Cultural	Scenic	Safety
1 Agricultural Valley	50%	n.a.	80%	0%	80%	90%
2 South Placer Urban	60%		60%	0%	50%	70%
3 Loomis Basin	60%		80%	0%	60%	90%
4 Sheridan / Garden Bar	80%		95%	0%	90%	90%
5 Auburn / Bowman	80%		95%	0%	80%	90%
6 American River Canyon	0%		50%	0%	0%	0%
7 Lower Sierra	0%		90%	0%	80%	70%
8 Foresthill	0%		50%	0%	80%	70%
9 West Slope Sierra	0%		50%	0%	0%	70%
10 East Slope Sierra	0%		50%	0%	0%	70%
Total						

III.A.3. Element Overlap – Residual Area Needed In Addition to Biological Resources (area in acres)

Name	Agriculture	Biological Recreation	Cultural	Scenic	Safety	Total	Total as % of Area		
1 Agricultural Valley	56,067	19,218	4,497	360	5	800	120	25,000	44.6%
2 South Placer Urban	67,730	260	863	160	5	5,882	30	7,200	10.6%
3 Loomis Basin	45,440	160	955	80	5	1,798	3	3,000	6.6%
4 Sheridan / Garden Bar	74,523	2,400	12,982	600	10	300	25	16,317	21.9%
5 Auburn / Bowman	27,991	400	3,267	125	10	720	3	4,525	16.2%
6 American River Canyon	26,753	0	17	200	0	2,500	0	2,717	10.2%
7 Lower Sierra	42,360	0	3,413	100	10	240	3	3,766	8.9%
8 Foresthill	31,018	0	1,383	200	10	600	8	2,200	7.1%
9 West Slope Sierra	428,688	0	5,049	200	0	1,500	15	6,764	1.6%
10 East Slope Sierra	159,115	0	1,861	200	0	1,000	15	3,076	1.9%
Total	959,684	22,438	34,287	2,225	55	15,339	221	74,565	7.8%

Note: The open space and farmland conservation targets demonstrate one approach to implementation of the recommendations. Allocation among elements and between Study Areas would vary in application.

III.A.4 Planning and Start-up Factors (\$/ac)

0.90 Economy of Scale Factor (except Recreation)

Name	Agricultur e	Biological	Recreatio n	Cultural	Scenic	Safety
1 Agricultural Valley	25	584	1,042	500	10	500
2 South Placer Urban	45	493	7,813	500	10	500
3 Loomis Basin	60	322	6,250	500	10	500
4 Sheridan / Garden Bar	35	191	208	500	10	500
5 Auburn / Bowman	60	165	500	500	10	500
6 American River Canyon	0	25,345	1,563	500	10	500
7 Lower Sierra	0	114	1,250	500	10	500
8 Foresthill	0	140	1,563	500	10	500

9 West Slope Sierra	0	139	1,563	500	10	500		
10 East Slope Sierra	0	208	1,563	500	10	500		
III.A.5. Planning and Start-up Costs (\$1000)								
Name	Agriculture	Biological Recreation	Cultural	Scenic	Safety	Total	% of Total	
1 Agricultural Valley	563	2,364	1,875	2	36	540	5,379	21.7%
2 South Placer Urban	26	383	3,125	2	65	45	3,646	14.7%
3 Loomis Basin	22	277	2,500	2	27	11	2,839	11.4%
4 Sheridan / Garden Bar	378	2,232	2,500	5	27	113	5,254	21.2%
5 Auburn / Bowman	108	485	1,250	5	32	11	1,891	7.6%
6 American River Canyon	0	388	625	0	23	0	1,035	4.2%
7 Lower Sierra	0	350	1,250	5	11	5	1,620	6.5%
8 Foresthill	0	174	625	5	20	11	835	3.4%
9 West Slope Sierra	0	632	625	0	14	23	1,293	5.2%
10 East Slope Sierra	0	348	625	0	9	23	1,005	4.1%
Total	1,096	7,632	15,000	25	263	781	24,797	100.0%
A6. Operating Factors (\$/ac/year)								
0.90 Scale Factor								
Name	Agriculture	Biological Recreation	Cultural	Scenic	Safety			
1 Agricultural Valley	3	56	89	1,000	1	5		
2 South Placer Urban	5	53	385	1,000	1	5		
3 Loomis Basin	6	37	385	1,000	1	5		
4 Sheridan / Garden Bar	4	32	89	1,000	1	5		
5 Auburn / Bowman	6	28	89	1,000	1	5		
6 American River Canyon	0	85	385	1,000	1	5		
7 Lower Sierra	0	26	133	1,000	1	5		

8 Foresthill	0	27	385	1,000	1	5		
9 West Slope Sierra	0	29	385	1,000	1	5		
10 East Slope :Sierra	0	35	385	1,000	1	5		
A7. Operating Costs (\$1000)								
Name	Agricultur e	Biological	Recreatio n	Cultural	Scenic	Safety	Total	% of Total
1 Agricultural Valley	68	227	144	5	4	5	452	12.8%
2 South Placer Urban	3	41	139	5	6	0	194	5.5%
3 Loomis Bas in	2	32	139	5	3	0	180	5.1%
4 Sheridan / Garden Bar	43	374	960	9	3	1	1,390	39.4%
5 Auburn / Bowman	11	82	200	9	3	0	306	8.7%
6 American River Canyon	0	1	139	0	2	0	142	4.0%
7 Lower Sierra	0	80	120	9	1	0	210	5.9%
8 Foresthill	0	34	139	9	2	0	183	5.2%
9 West Slope Sierra	0	132	139	0	1	0	272	7.7%
10 East Slope :Sierra	0	59	139	0	1	0	198	5.6%
Total	127	1,061	2,255	50	26	8	3,527	100.0%
III.A.8. Acquiring the Public Interest – Cost (\$1000)								
							105.0% Transaction Cost	
	A.	B.	C.	D.	E.	F.		
	Land Cost	Agricultur	Biological	Outdoor	Cultural	Scenic/	Public	Area Total
	\$/ac	e	Resources	Recreatio	Resources	Urban	Safety	Area as % of All
				n		Separator		
						s		
Extent of Easement (% of area)	100.0%	50.0%	30.0%	0.0%	100.0%	100.0%		
Easement Cost (% of Fee)	50.0%	75.0%	75.0%	75.0%	75.0%	75.0%		
1 Agricultural Valley	1,800	18,161	7,437	629	9	1,134	170	27,541 17.7%
2 South Placer Urban	6,000	819	4,757	932	32	27,792	142	34,474 22.1%
3 Loomis Basin	4500	378	3,948	350	24	6,370	9	11,078 7.1%

4 Sheridan / Garden Bar	2,600	3,276	31,011	1,515	27	614	51	36,495	23.4%
5 Auburn / Bowman	6000	1,260	18,009	728	63	3,402	12	23,475	15.1%
6 American River Canyon	2,400	0	37	466	0	4,725	0	5,229	3.4%
7 Lower Sierra	1,250	0	3,920	121	13	236	3	4,293	2.8%
8 Foresthill	1,250	0	1,588	243	13	590	7	2,442	1.6%
9 West Slope Sierra	1,250	0	5,798	243	0	1,477	15	7,533	4.8%
10 East Slope Sierra	1,250	0	2,137	243	0	984	15	3,379	2.2%
Total	28,300	23,894	78,644	5,471	181	47,325	424	155,938	100.0%

III.A.9. Prorated Share of Acquiring the Public Interest – Cost

	A. Agriculture	B. Biological	C. Recreation	D. Cultural	E. Scenic	F. Safety	Area Total	
Area proration	32.0%	27.4%	15.8%	0.0%	23.4%	1.4%		
Prorated cost distribution	49,952	42,764	24,571	69	36,419	2,164		
Easement factor	50.0%	87.5%	92.5%	100.0%	75.0%	75.0%		
Leveraged cost	24,976	37,419	22,728	69	27,315	1,623	114,128	136.6% easement scale
Factored share (\$1000)	34,126	51,127	31,054	94	37,321	2,218	155,938	
Share as % of Total	21.9%	32.8%	19.9%	0.1%	23.9%	1.4%		

III.B. High Effort Scenario: Biological Resources Detail

III.B.1. Conservation Targets by Habitat Group – Area (ac)

		---- Habitat ----				Total
		Vernal Pool/ Grassland	Creeks/ Riparian	Foothill Woodland	Sierra Nevada	
No.	Name	Acres		Acres	Acres	Acres
1	Agricultural Valley	56,096	1,800	2,697		4,497
2	South Placer Urban	67,748	500	363		863
3	Loomis Basin	42,298		315	640	955
4	Sheridan / Garden Bar	77,743	1,800	1,182	10,000	12,982
5	Auburn / Bowman	27,986		267	3,000	3,267
6	American	26,753		17		17

River Canyon						
7 Lower Sierra	42,360		133	2,000	1,280	3,413
8 Foresthill	31,018		103		1,280	1,383
9 West Slope Sierra	428,688		569		4,480	5,049
10 East Slope Sierra	159,115		581		1,280	1,861
Total	959,805	4,100	6,227	15,640	8,320	34,287

Note: The targets reflect a reasonable expectation for public funding and do NOT reflect the effect of a regional mitigation program.

III.B.2. Conservation Targets For Riparian and Creek -- Length and Area (ac)

Creeks/ Riparian No. Name	Enhancement		Protection			Total		
	Miles	Avg Width (ft)	Acres	Miles	Avg Width (ft)	Acres	Miles	Acres
1 Agricultural Valley	25	250	758	40	400	1,939	65	2,697
2 South Placer Urban	5	200	121	10	200	242	15	363
3 Loomis Basin	3	200	73	10	200	242	13	315
4 Sheridan / Garden Bar	15	250	455	20	300	727	35	1,182
5 Auburn / Bowman	5	140	85	10	150	182	15	267
6 American River Canyon	1	140	17			0	1	17
7 Lower Sierra	1	100	12	10	100	121	11	133
8 Foresthill	1	100	12	5	150	91	6	103
9 West Slope Sierra	2	100	24	30	150	545	32	569
10 East Slope Sierra	3	100	36	30	150	545	33	581
Total	61		1,593	165		4,634	226	6,227

*

III.B.3 Planning and Start-up Costs – Biology

	---- Habitat ----					Sierra Nevada	Total	Avg per ac
	Vernal Pool/ Grassland	Riparian Enhancement	Riparian Protection	Foothill Woodland				
Factor (\$/ac)	125	2400	300	94		107		
1 Agricultural Valley	225,000	1,819,200	581,700	0	0	2,625,900	584	
2 South Placer Urban	62,500	290,400	72,600	0	0	425,500	493	
3 Loomis Basin	0	175,200	72,600	60,160	0	307,960	322	
4 Sheridan / Garden Bar	225,000	1,092,000	218,100	940,000	0	2,475,100	191	
5 Auburn / Bowman	0	204,000	54,600	282,000	0	540,600	165	
6 American River Canyon	0	40,800	0	0	0	40,800	2400	
7 Lower Sierra	0	28,800	36,300	188,000	136,960	390,060	114	
8 Foresthill	0	28,800	27,300	0	136,960	193,060	140	
9 West Slope Sierra	0	57,600	163,500	0	479,360	700,460	139	
10 East Slope Sierra	0	86,400	163,500	0	136,960	386,860	208	
Total	512,500	3,823,200	1,390,200	1,470,160	890,240	8,086,300	236	

III.B.4 Annual Operating Costs – Biology

---- Habitat ----

	Vernal Pool/ Grassland	Riparian Enhancemen t	Riparian Protection	Foothill Woodland	Sierra Nevada	Total	Avg per ac
Factor (\$/ac)	45	85	55	25	25		
1 Agricultural Valley	81,000	64,430	106,645	0	0	252,075	56
2 South Placer Urban	22,500	10,285	13,310	0	0	46,095	53
3 Loomis Basin	0	6,205	13,310	16,000	0	35,515	37
4 Sheridan / Garden Bar	81,000	38,675	39,985	250,000	0	409,660	32
5 Auburn / Bowman	0	7,225	10,010	75,000	0	92,235	28
6 American River Canyon	0	1,445	0	0	0	1,445	85
7 Lower Sierra	0	1,020	6,655	50,000	32,000	89,675	26
8 Foresthill	0	1,020	5,005	0	32,000	38,025	27
9 West Slope Sierra	0	2,040	29,975	0	112,000	144,015	29
10 East Slope Sierra	0	3,060	29,975	0	32,000	65,035	35
Total	184,500	135,405	254,870	391,000	208,000	1,173,775	34

IV.A. Summary of Conservation Scenarios by Study Area

IV.A.1. Extent of Public Interest by Study Area

Name	Study Area Total	A. Low Involve ment (acres)	B. Low Involve ment (%)	C. Medium Involve ment (acres)	D. Medium Involve ment (%)	E. High Involve ment (acres)	F. High Involvement (%)
1 Agricultural Valley	56,067	2,212	3.9%	6,080	10.8%	25,000	44.6%
2 South Placer Urban	67730	412	0.6%	1,262	1.9%	7,200	10.6%
3 Loomis Basin	45440	396	0.9%	608	1.3%	3,000	6.6%
4 Sheridan / Garden Bar	74523	3,004	4.0%	13,636	18.3%	16,317	21.9%
5 Auburn / Bowman	27991	758	2.7%	3,561	12.7%	4,525	16.2%
6 American River Canyon	26,753	0	0.0%	37	0.1%	2,717	10.2%
7 Lower Sierra	42,360	373	0.9%	2,336	5.5%	3,766	8.9%
8 Foresthill	31,018	328	1.1%	376	1.2%	2,200	7.1%
9 West Slope Sierra	428,688	73	0.0%	909	0.2%	6,764	1.6%
10 East Slope Sierra	159,115	73	0.0%	971	0.6%	3,076	1.9%
Total	959,684	7,629	0.8%	29,775	3.1%	74,565	7.8%

IV.A.2. Planning for Public Interest Objectives and Start-up Costs (one-time)

Name	A. Low Involve ment (\$1000)	B. Low Involve ment (% of Total)	C. Medium Involve ment (\$1000)	D. Medium Involve ment (% of Total)	E. High Involve ment (\$1000)	F. High Involvement (% of Total)
1 Agricultural Valley	1,034	22.3%	3,024	16.8%	5,379	21.7%
2 South Placer Urban	745	16.1%	3,548	19.8%	3,646	14.7%
3 Loomis Basin	462	10.0%	1,460	8.1%	2,839	11.4%
4 Sheridan / Garden Bar	1,269	27.4%	4,227	23.6%	5,254	21.2%
5 Auburn / Bowman	374	8.1%	1,646	9.2%	1,891	7.6%
6 American River Canyon	0	0.0%	594	3.3%	1,035	4.2%
7 Lower Sierra	305	6.6%	1,514	8.4%	1,620	6.5%

8 Foresthill	224	4.8%	717	4.0%	835	3.4%
9 West Slope Sierra	113	2.4%	590	3.3%	1,293	5.2%
1 East Slope Sierra	113	2.4%	625	3.5%	1,005	4.1%
0 Total	4,639	100.0%	17,945	100.0%	24,797	100.0%
Note: Does not include Program start-up or Regulatory Compliance planning costs.						

IV.A.3. Operations and Monitoring (Annual)

Name	A. Low Involvement nt (\$1000)	B. Low Involvement nt (% of Total)	C. Medium Involvement nt (\$1000)	D. Medium Involvement nt (% of Total)	E. High Involvement nt (\$1000)	F. High Involvement (% of Total)
1 Agricultural Valley	191	19.0%	238	9.8%	452	12.8%
2 South Placer Urban	143	14.2%	90	3.7%	194	5.5%
3 Loomis Basin	55	5.4%	40	1.6%	180	5.1%
4 Sheridan / Garden Bar	320	31.9%	1,421	58.6%	1,390	39.4%
5 Auburn / Bowman	119	11.8%	271	11.2%	306	8.7%
6 American River Canyon	0	0.0%	20	0.8%	142	4.0%
7 Lower Sierra	57	5.7%	191	7.9%	210	5.9%
8 Foresthill	48	4.8%	30	1.3%	183	5.2%
9 West Slope Sierra	36	3.5%	59	2.4%	272	7.7%
1 East Slope Sierra	36	3.5%	61	2.5%	198	5.6%
0 Total	1,005	100.0%	2,423	100.0%	3,527	100.0%

IV.A.4. Cost of Public Interest by Study Area (\$1000)

Name	A. Low Involvement nt (acres)	B. Low Involvement nt (%)	C. Medium Involvement nt (acres)	D. Medium Involvement nt (%)	E. High Involvement nt (acres)	F. High Involvement (%)
1 Agricultural Valley	3,616	18.3%	8,477	11.7%	27,541	17.7%
2 South Placer Urban	2,334	11.8%	6,257	8.6%	34,474	22.1%
3 Loomis Basin	1,642	8.3%	2,397	3.3%	11,078	7.1%
4 Sheridan / Garden Bar	7,142	36.1%	30,942	42.5%	36,495	23.4%
5 Auburn / Bowman	4,052	20.5%	19,334	26.6%	23,475	15.1%
6 American River Canyon	0	0.0%	85	0.1%	5,229	3.4%
7 Lower Sierra	435	2.2%	2,672	3.7%	4,293	2.8%
8 Foresthill	378	1.9%	425	0.6%	2,442	1.6%
9 West Slope Sierra	85	0.4%	1,043	1.4%	7,533	4.8%
1 East Slope Sierra	85	0.4%	1,114	1.5%	3,379	2.2%
0 Total	19,770	100.0%	72,746	100.0%	155,938	100.0%
Average Cost (\$/ac)	2,591		2,443		2,091	

IV.A.5. Prorated Share of Public Interest Cost by Element

	A. Agriculture	B. Biological Recreation	C. Cultural	D. Scenic	F. Safety	Total
Low Effort Scenario						
Factored share (\$1000)	641	12,983	6,146	0	0	19,770
Share as % of Total	3%	66%	31%	0%	0%	

Medium Effort Scenario							
Factored share (\$1000)	9,735	30,417	22,029	38	8,570	1,956	72,746
Share as % of Total	13%	42%	30%	0%	12%	3%	
High Effort Scenario							
Factored share (\$1000)	34,126	51,127	31,054	94	37,321	2,218	155,938
Share as % of Total	22%	33%	20%	0%	24%	1%	

IV.A.6. Summary of Area Management Targets by Element

	A. Agriculture	B. Biological	C. Recreation	D. Cultural	E. Scenic	F. Safety	Sum
Low Effort Scenario							
Target (acres)	500	5,784	2,590	0	0	0	8,874
Target as % of Sum	6%	65%	29%	0%	0%	0%	
Medium Effort Scenario							
Target (acres)	12,950	23,121	15,840	25	7,600	1,735	61,271
Target as % of Sum	21%	38%	26%	0%	12%	3%	
High Effort Scenario							
Target (acres)	40,050	34,287	19,700	55	29,200	1,735	125,027
Target as % of Sum	32%	27%	16%	0%	23%	1%	

IV.A.7. Tabulation of Area Management Targets

Element	Scenario		
	Low Involvement	Medium Involvement	High Involvement
Agriculture	500	12,950	40,050
Biological	5,784	23,121	34,287
Recreation	2,590	15,840	19,700
Cultural	0	25	55
Scenic	0	7,600	29,200
Safety	0	1,735	1,735
Total Area, accounting for Overlap	7,629	29,775	74,565

